Application No. 10/720,189 Reply to Office Action of September 22, 2006

IN THE DRAWINGS

The attached sheet of drawings includes changes to Figure 4. This sheet, which includes Figure 4, replaces the original sheet including Figure 4.

Attachment: One Replacement Sheet

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-7 and 9-21 are pending. Claims 4 and 5 are withdrawn. Claims 1 and 14 are amended by the present amendment. As amended Claims 1 and 14 are supported by the original disclosure, ¹ no new matter is added.

In the outstanding Office Action, Claims 1, 3, 6, 9-17, and 20 were rejected as unpatentable over Yamaguchi et al. (Japanese Patent Publication No. 5-140771, hereinafter "Yamaguchi") in view of Takagi (U.S. Patent No. 6,676,759); Claim 2 was rejected as unpatentable over Yamaguchi in view of Takagi and further in view of Kaminishizono (Japanese Patent Publication No. 2000049100); Claims 7 and 21 were rejected as unpatentable over Yamaguchi in view of Takagi and further in view of Koike (U.S. Patent Application Publication No. 20020072240); Claims 1, 3, 6, 9-17, and 20 were rejected as unpatentable over Morimoto et al. (Japanese Patent Publication No. 2001-230239, hereinafter "Morimoto") in view of Takagi; Claim 2 was rejected as unpatentable over Morimoto in view of Takagi and further in view of Kaminishizono; and Claims 7 and 21 were rejected as unpatentable over Morimoto in view of Takagi and further in view of Koike (U.S. Patent Application Publication No. 20020072240).

Initially, applicants and applicants' representatives thank Primary Examiner

Hassanzadeh and Examiner Crowell for the interview held on October 24, 2006 to discuss the present case. During the interview, differences between the claimed invention and the cited references were discussed in detail, as were proposed amendments as presented herein.

Primary Examiner Hassanzadeh and Examiner Crowell agreed that the claims as amended herein overcome the rejections of record.

¹See, e.g., paragraph 34.

With regard to the rejection of Claim 1 as unpatentable over unpatentable over Yamaguchi in view of Takagi, that rejection is respectfully traversed.

Amended Claim 1 recites in part:

a process chamber; an upper electrode assembly;

a plurality of pressure detectors configured to detect pressures in a plurality of locations in the process chamber;

a fluid flow control member including a plurality of recesses: and

a chuck assembly including a plurality of lift pin assemblies, for lifting the fluid flow control member at at least one location, each lift pin assembly including a lift pin configured to engage with a respective recess of the fluid flow control member to directly lift the fluid flow control member, the lift pins configured to be controlled based on the pressures detected by the plurality of pressure detectors.

In contrast, the abstract of <u>Yamaguchi</u> describes a process chamber 2 including a focus ring 24. Based on the figures of <u>Yamaguchi</u>, process chamber 2 does not appear to have any pressure detectors. Further, <u>Takagi</u> describes a process chamber 12 that also does not have any pressure detectors. Thus, neither <u>Yamaguchi</u> nor <u>Takagi</u> can teach or suggest lift pins configured to be controlled based on pressures detected by a plurality of pressure detectors. Accordingly, neither <u>Yamaguchi</u> nor <u>Takagi</u> teach or suggest "a plurality of pressure detectors" or "a chuck assembly" as defined in amended Claim 1. Consequently, Claim 1 (and Claims 2-7 and 9-13 dependent therefrom) is patentable over <u>Yamaguchi</u> in view of <u>Takagi</u>.

With regard to the rejection of Claim 2 as unpatentable over <u>Yamaguchi</u> in view of <u>Takagi</u> and further in view of <u>Kaminishizono</u>, it is noted that Claim 2 is dependent from Claim 1, and thus is believed to be patentable for at least the reasons discussed above. Further, it is respectfully submitted that <u>Kaminishizono</u> does not cure any of the above-noted deficiencies of <u>Yamaguchi</u> and <u>Takagi</u>. Accordingly, it is respectfully submitted that Claim 2 is patentable over <u>Yamaguchi</u> in view of <u>Takagi</u> and further in view of <u>Kaminishizono</u>.

Claim 14 recites in part "a plurality of pressure detectors configured to detect pressures in a plurality of locations in the process chamber" and "a chuck assembly including a plurality of lifting means for lifting the fluid flow control member at at least one location, each lifting means engaging a respective recess of the fluid flow control member to directly lift the fluid flow control member, the lifting means being controlled based on the pressures detected by the plurality of pressure detectors." Since neither Yamaguchi nor Takagi can teaches or suggests a plurality of pressure detectors or lifting means controlled based on pressures detected by a plurality of pressure detectors, neither Yamaguchi nor Takagi teach or suggest "a plurality of pressure detectors" or "a chuck assembly" as defined in amended Claim 14. Consequently, Claim 14 (and Claims 15-21 dependent therefrom) is patentable over Yamaguchi in view of Takagi.

With regard to the rejection of Claims 7 and 21 as unpatentable over <u>Yamaguchi</u> in view of <u>Takagi</u> and further in view of <u>Koike</u>, it is noted that Claims 7 and 21 are dependent from Claims 1 and 14, and thus are believed to be patentable for at least the reasons discussed above. Further, it is respectfully submitted that <u>Koike</u> does not cure any of the above-noted deficiencies of <u>Yamaguchi</u> and <u>Takagi</u>. Accordingly, it is respectfully submitted that Claims 7 and 21 are patentable over <u>Yamaguchi</u> in view of <u>Takagi</u> and further in view of <u>Koike</u>.

With regard to the rejection of Claim 1 as unpatentable over unpatentable over <u>Morimoto</u> in view of <u>Takagi</u>, that rejection is respectfully traversed.

Morimoto describes a treating chamber 2 including *laser* detector 55. It is respectfully submitted that treating chamber 2 of <u>Morimoto</u> does not have any *pressure* detectors. Further, as noted above, <u>Takagi</u> describes a process chamber 12 that also does not have any pressure detectors. Thus, neither <u>Morimoto</u> nor <u>Takagi</u> can teach or suggest lift pins configured to be controlled based on pressures detected by a plurality of pressure detectors. Accordingly, neither <u>Morimoto</u> nor <u>Takagi</u> teach or suggest "a plurality of

pressure detectors" or "a chuck assembly" as defined in amended Claim 1. Consequently, Claim 1 (and Claims 2-7 and 9-13 dependent therefrom) is patentable over <u>Morimoto</u> in view of <u>Takagi</u>.

With regard to the rejection of Claim 2 as unpatentable over Morimoto in view of Takagi and further in view of Kaminishizono, it is noted that Claim 2 is dependent from Claim 1, and thus is believed to be patentable for at least the reasons discussed above. Further, it is respectfully submitted that Kaminishizono does not cure any of the above-noted deficiencies of Morimoto and Takagi. Accordingly, it is respectfully submitted that Claim 2 is patentable over Morimoto in view of Takagi and further in view of Kaminishizono.

Claim 14 recites in part "a plurality of pressure detectors configured to detect pressures in a plurality of locations in the process chamber" and "a chuck assembly including a plurality of lifting means for lifting the fluid flow control member at at least one location, each lifting means engaging a respective recess of the fluid flow control member to directly lift the fluid flow control member, the lifting means being controlled based on the pressures detected by the plurality of pressure detectors." Since neither Morimoto nor Takagi can teaches or suggests a plurality of pressure detectors or lifting means controlled based on pressures detected by a plurality of pressure detectors, neither Morimoto nor Takagi teach or suggest "a plurality of pressure detectors" or "a chuck assembly" as defined in amended Claim 14. Consequently, Claim 14 (and Claims 15-21 dependent therefrom) is patentable over Morimoto in view of Takagi.

With regard to the rejection of Claims 7 and 21 as unpatentable over <u>Morimoto</u> in view of <u>Takagi</u> and further in view of <u>Koike</u>, it is noted that Claims 7 and 21 are dependent from Claims 1 and 14, and thus are believed to be patentable for at least the reasons discussed above. Further, it is respectfully submitted that <u>Koike</u> does not cure any of the above-noted

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deficiencies of Morimoto and Takagi. Accordingly, it is respectfully submitted that Claims 7

and 21 are patentable over Morimoto in view of Takagi and further in view of Koike.

With regard to withdrawn Claims 4 and 5, it is respectfully requested that these

claims be rejoined and allowed, as they depend from Claim 1, which is believed to be

allowable.

Consequently, in light of the foregoing comments, it is respectfully submitted that the

invention defined by Claims 1-7 and 9-21 patentably distinguishes over the cited art. The

present application is therefore believed to be in condition for formal allowance and an early

and favorable reconsideration of this application is therefore respectfully requested.

Respectfully submitted,

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